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What is claimed is:

1. Stable powderous formulations comprising a fat-soluble active ingredient in a matrix of a milk protein composition, wherein the protein is thermally cross-linked with a reducing sugar or a reducing sugar derivative.
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2. Formulations according to claim 1, wherein the milk protein composition is a native milk protein or partially hydrolyzed milk protein with a degree of hydrolysis of up to 25% or mixtures thereof having a protein content of more than 80 wt.-%.
3. Formulations according to claim 1, wherein the milk protein composition is a native
10 milk protein or partially hydrolyzed milk protein with a degree of hydrolysis of up to 15 % or mixtures thereof having a protein content of more than 80 wt.-%.
4. Formulations according to claim 1, wherein the milk protein composition is a native milk protein or partially hydrolyzed milk protein with a degree of hydrolysis of up to 10 % or mixtures thereof having a protein content of more than 80 wt.-%.
- 15 5. Formulations according to any one of claims 1 to 4, wherein the milk protein is a caseinate or partially hydrolyzed caseinate.
6. Formulations according to any one of claims 1 - 5, wherein the milk protein composition contains additionally a plant protein or plant protein hydrolysate or mixture thereof.
7. Formulations according to claim 6 wherein the average molecular weight of at least 80
20 % of the plant protein hydrolysate is below 2500 Daltons.
8. Formulations according to claims 6 or 7, wherein the plant protein or plant protein hydrolysate is obtained from potato protein, soy protein, wheat protein, pea protein, rice protein or lupin protein.
9. Formulations according to any one of claims 1 - 8, wherein the milk protein composition
25 contains additionally a carbohydrate or carbohydrate derivative, e.g. saccharose, invert sugar, glucose, fructose, xylose, lactose, maltose, xanthan gum, acacia gum, pectins, guar, caroub gums, alginates, celluloses, cellulose derivatives, starch, modified starch and starch hydrolysates, such as dextrans and maltodextrins, especially such in the range of 5-65

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dextrose equivalents (hereinafter: DE) and glucose syrup, especially such in the range of 20-95 DE.

10. Formulations according to any one of claims 1 - 9 further comprising an adjuvant.
11. Formulations according to claim 10 wherein the adjuvant is calcium silicate, silicic
5 acid, starch or calcium carbonate, or mixture thereof.
12. Formulations according to any one of claims 1 - 11, wherein the fat-soluble active ingredient is vitamin A, D, E or K, or a carotenoid, or a polyunsaturated fatty acid, or esters thereof, or mixtures thereof.
13. Formulations according to claim 12, wherein the fat-soluble active ingredient is mixed
10 with a plant or animal oil or fat, e.g. sunflower oil, palm oil or corn oil.
14. Formulations according to any one of claims 1 - 13, wherein the reducing sugar is glucose, fructose, saccharose or xylose.
15. Stable powderous formulations comprising a fat-soluble active ingredient in a matrix of a milk protein composition, wherein the milk protein is a partially hydrolyzed milk
15 protein with a degree of hydrolysis of 3.5% to 25%.
16. Food, beverages, animal feeds, cosmetics or drugs comprising a formulation according to any one of claims 1 - 15.
17. Process for the preparation of formulations according to any one of claims 1 - 14, which comprises preparing an aqueous emulsion of the fat-soluble active ingredient and
20 the milk protein composition, adding a reducing sugar or a reducing sugar derivative, converting the emulsion into a dry powder, and submitting the dry powder to cross-linking the protein by heat treatment.